## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

| Application Serial Number: | 10/8/2.2380 |
|----------------------------|-------------|
| Source:                    | 1F4/6,      |
| Date Processed by STIC:    | 4//3/06     |

## ENTERED

#### CRF Errors Edited by the STIC Systems Branch

| Serial 1 | Number: 10/8/2,2380  | CRF Edit Date: 4/13/0. Edited by: |
|----------|--|-----------------------------------|
|          | Realigned nucleic acid/amino acid numbers/text text "wrapped" to the next line | in cases where the sequence       |
|          | Corrected the SEQ ID NO. Sequence numbers e                                    | edited were:                      |
|          | Inserted or corrected a nucleic number at the en<br>NO's edited:               | d of a nucleic line. SEQ ID       |
| _        | Deleted: invalid beginning/end-of-file text;                                   | page numbers                      |
|          | Inserted mandatory headings/numeric identifier                                 | s, specifically:                  |
|          | Moved responses to same line as heading/numer                                  | ic identifier, specifically:      |
|          | Other:   |                                   |
|          |  |                                   |



IFW16

RAW SEQUENCE LISTING DATE: 04/13/2006
PATENT APPLICATION: US/10/812,238D TIME: 19:19:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

```
3 <110> APPLICANT: Wary, Kishore, K.
        Humtsoe, Joseph O.
 6 <120> TITLE OF INVENTION: Uses of Vascular Endothelial Growth Factor
       and Type I Collagen Inducible Protein (VCIP)
9 <130> FILE REFERENCE: D6563
11 <140> CURRENT APPLICATION NUMBER: US 10/812,238D
12 <141> CURRENT FILING DATE: 2004-03-29
14 <150> PRIOR APPLICATION NUMBER: US 60/458,164
15 <151> PRIOR FILING DATE: 2003-03-27
17 <160> NUMBER OF SEQ ID NOS: 42
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 15
21 <212> TYPE: PRT
22 <213> ORGANISM: Unknown
24 <220> FEATURE:
25 <221> NAME/KEY: CHAIN
26 <223> OTHER INFORMATION: peptide used to raise anti-VCIP-cyto-C16
        antibody
29 <400> SEQUENCE: 1
30 Leu Ser Pro Val Asp Ile Ile Asp Arg Asn Asn His His Asn Met
33 <210> SEQ ID NO: 2
34 <211> LENGTH: 20
35 <212> TYPE: PRT
36 <213> ORGANISM: Unknown
38 <220> FEATURE:
39 <221> NAME/KEY: CHAIN
40 <223> OTHER INFORMATION: peptide used to raise anti-VCIP-RGD antibody
42 <400> SEQUENCE: 2
43 Glu Gly Tyr Ile Gln Asn Tyr Arg Cys Arg Gly Asp Asp Ser Lys
44
45 Val Gln Glu Ala Arg
46
48 <210> SEQ ID NO:
49 <211> LENGTH: 33
50 <212> TYPE: DNA
51 <213> ORGANISM: Artificial Sequence
53 <220> FEATURE:
54 <221> NAME/KEY: primer bind
55 <223> OTHER INFORMATION: forward primer for VCIP
57 <400> SEQUENCE: 3
58 ggaggatece tegegeegea geeagegeea tge
60 <210> SEQ ID NO: 4
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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

61 <211> LENGTH: 25 62 <212> TYPE: DNA 63 <213> ORGANISM: Artificial Sequence 65 <220> FEATURE: 66 <221> NAME/KEY: primer\_bind 67 <223> OTHER INFORMATION: reverse primer for VCIP 69 <400> SEQUENCE: 4 70 gtggcaccta catcatgttg tggtg 25 72 <210> SEQ ID NO: 5 73 <211> LENGTH: 22 74 <212> TYPE: DNA 75 <213> ORGANISM: Artificial Sequence 77 <220> FEATURE: 78 <221> NAME/KEY: primer bind 79 <223> OTHER INFORMATION: forward primer for human uPAR 81 <400> SEQUENCE: 5 82 cttcctqaaa tqcqtcaaca cc 22 84 <210> SEQ ID NO: 6 85 <211> LENGTH: 22 86 <212> TYPE: DNA 87 <213> ORGANISM: Artificial Sequence 89 <220> FEATURE: 90 <221> NAME/KEY: primer\_bind 91 <223> OTHER INFORMATION: reverse primer for human uPAR W--> 92 <400> SEQUENCE: 6 93 tcatagctgg gaaaactgag gc 22 95 <210> SEQ ID NO: 7 96 <211> LENGTH: 22 97 <212> TYPE: DNA 98 <213> ORGANISM: Artificial Sequence 100 <220> FEATURE: 101 <221> NAME/KEY: primer bind 102 <223> OTHER INFORMATION: forward primer for b???-actin 104 <400> SEQUENCE: 7 105 ggctgtgcta tccctgtacg cc 22 107 <210> SEQ ID NO: 8 108 <211> LENGTH: 22 109 <212> TYPE: DNA 110 <213> ORGANISM: Artificial Sequence 112 <220> FEATURE: 113 <221> NAME/KEY: primer bind 114 <223> OTHER INFORMATION: reverse primer for b???-actin 116 <400> SEQUENCE: 8 117 gggcagtgat ctccttctgc at 22 119 <210> SEQ ID NO: 9 120 <211> LENGTH: 23 121 <212> TYPE: DNA 122 <213> ORGANISM: Artificial Sequence

124 <220> FEATURE:

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

125 <221> NAME/KEY: primer bind 126 <223> OTHER INFORMATION: forward primer for GAPDH 128 <400> SEQUENCE: 9 129 ggtctcctct gacttcaaca gcg 131 <210> SEQ ID NO: 10 132 <211> LENGTH: 24 133 <212> TYPE: DNA 134 <213> ORGANISM: Artificial Sequence 136 <220> FEATURE: 137 <221> NAME/KEY: primer\_bind 138 <223> OTHER INFORMATION: reverse primer for GAPDH 140 <400> SEQUENCE: 10 141 ggtactttat tgatggtaca tgac 24 142 <210> SEQ ID NO: 11 143 <211> LENGTH: 6 144 <212> TYPE: PRT 145 <213> ORGANISM: Unknown 147 <220> FEATURE: 148 <221> NAME/KEY: CHAIN 149 <223> OTHER INFORMATION: a peptide containing RGD sequence 151 <400> SEQUENCE: 11 152 Gly Arg Gly Asp Ser Pro 153 155 <210> SEQ ID NO: 12 156 <211> LENGTH: 9 157 <212> TYPE: PRT 158 <213> ORGANISM: Unknown 160 <220> FEATURE: 161 <221> NAME/KEY: CHAIN 162 <223> OTHER INFORMATION: HA-tag 164 <400> SEQUENCE: 12 165 Tyr Pro Tyr Asp Val Pro Asp Tyr Ala 168 <210> SEQ ID NO: 13 169 <211> LENGTH: 311 170 <212> TYPE: PRT 171 <213> ORGANISM: Unknown 173 <220> FEATURE: 174 <221> NAME/KEY: CHAIN 175 <223> OTHER INFORMATION: human VCIP 177 <400> SEQUENCE: 13 178 Met Gln Asn Tyr Lys Tyr Asp Lys Ala Ile Val Pro Glu Ser Lys 180 Asn Gly Gly Ser Pro Ala Leu Asn Asn Pro Arg Arg Ser Gly 181 20 25 30 182 Ser Lys Arg Val Leu Leu Ile Cys Leu Asp Leu Phe Cys Leu Phe 35 40

184 Met Ala Gly Leu Pro Phe Leu Ile Ile Glu Thr Ser Thr Ile Lys

55

185

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

```
186 Pro Tyr His Arg Gly Phe Tyr Cys Asn Asp Glu Ser Ile Lys Tyr
                     65
189 Pro Leu Lys Thr Gly Glu Thr Ile Asn Asp Ala Val Leu Cys Ala
                     80
191 Val Gly Ile Val Ile Ala Ile Leu Ala Ile Ile Thr Gly Glu Phe
                     95
                                        100
193 Tyr Arg Ile Tyr Tyr Leu Lys Lys Ser Arg Ser Thr Ile Gln Asn
                    110
                                        115
195 Pro Tyr Val Ala Ala Leu Tyr Lys Gln Val Gly Cys Phe Leu Phe
196
197 Gly Cys Ala Ile Ser Gln Ser Phe Thr Asp Ile Ala Lys Val Ser
                    140
                                        145
199 Ile Gly Arg Leu Arg Pro His Phe Leu Ser Val Cys Asn Pro Asp
                    155
                                        160
201 Phe Ser Gln Ile Asn Cys Ser Glu Gly Tyr Ile Gln Asn Tyr Arg
                    170
                                        175
203 Cys Arg Gly Asp Asp Ser Lys Val Gln Glu Ala Arg Lys Ser Phe
                    185
                                        190
205 Phe Ser Gly His Ala Ser Phe Ser Met Tyr Thr Met Leu Tyr Leu
                                        205
                    200
207 Val Leu Tyr Leu Gln Ala Arg Phe Thr Trp Arg Gly Ala Arg Leu
                    215
209 Leu Arg Pro Leu Leu Gln Phe Thr Leu Ile Met Met Ala Phe Tyr
211 Thr Gly Leu Ser Arg Val Ser Asp His Lys His His Pro Ser Asp
                                                             255
212
                    245
                                        250
213 Val Leu Ala Gly Phe Ala Gln Gly Ala Leu Val Ala Cys Cys Ile
                    260
                                        265
215 Val Phe Phe Val Ser Asp Leu Phe Lys Thr Lys Thr Thr Leu Ser
216
                    275
                                        280
217 Leu Pro Ala Pro Ala Ile Arg Lys Glu Ile Leu Ser Pro Val Asp
                    290
                                        295
219 Ile Ile Asp Arg Asn Asn His His Asn Met Met
220
                    305
222 <210> SEQ ID NO: 14
223 <211> LENGTH: 18
224 <212> TYPE: PRT
225 <213> ORGANISM: Unknown
227 <220> FEATURE:
228 <221> NAME/KEY: CHAIN
229 <223> OTHER INFORMATION: lipid phosphatase domain of human VCIP
231 <400> SEQUENCE: 14
232 Asp Ile Ala Lys Val Ser Ile Gly Arg Leu Arg Pro His Phe Leu
234 Ser Val Cys
236 <210> SEQ ID NO: 15
237 <211> LENGTH: 18
238 <212> TYPE: PRT
239 <213> ORGANISM: Unknown
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Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

241 <220> FEATURE: 242 <221> NAME/KEY: CHAIN 243 <223> OTHER INFORMATION: a rat peptide containing lipid phosphatase domain 246 <400> SEQUENCE: 15 247 Asp Ile Ala Lys Tyr Ser Ile Gly Arg Leu Arg Pro His Phe Leu 249 Ala Val Cys 251 <210> SEQ ID NO: 16 252 <211> LENGTH: 18 253 <212> TYPE: PRT 254 <213> ORGANISM: Unknown 256 <220> FEATURE: 257 <221> NAME/KEY: CHAIN 258 <223> OTHER INFORMATION: a mouse peptide containing lipid phosphatase domain 261 <400> SEQUENCE: 16 262 Asp Ile Ala Lys Tyr Thr Ile Gly Ser Leu Arg Pro His Phe Leu 263 10 264 Ala Ile Cys 266 <210> SEQ ID NO: 17 267 <211> LENGTH: 18 268 <212> TYPE: PRT 269 <213> ORGANISM: Unknown 271 <220> FEATURE: 272 <221> NAME/KEY: CHAIN 273 <223> OTHER INFORMATION: a human peptide containing lipid 274 phosphatase domain 276 <400> SEQUENCE: 17 277 Asp Leu Ala Lys Tyr Met Ile Gly Arg Leu Arg Pro Asn Phe Leu 278 5 279 Ala Val Cys 281 <210> SEQ ID NO: 18 282 <211> LENGTH: 18 283 <212> TYPE: PRT 284 <213> ORGANISM: Unknown 286 <220> FEATURE: 287 <221> NAME/KEY: CHAIN 288 <223> OTHER INFORMATION: a Drosophila peptide containing lipid 289 phosphatase domain 291 <400> SEQUENCE: 18 292 Asn Ile Ala Lys Tyr Ser Ile Gly Arg Leu Arg Pro His Phe Tyr 293 5 10 294 Thr Leu Cys 296 <210> SEQ ID NO: 19 297 <211> LENGTH: 18 298 <212> TYPE: PRT 299 <213> ORGANISM: C. elegans

301 <220> FEATURE:

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:38; Xaa Pos. 2,3,4,5,6,7
Seq#:40; Xaa Pos. 3,4,5,6,7,9,10,11

#### VERIFICATION SUMMARY

DATE: 04/13/2006 TIME: 19:19:31

PATENT APPLICATION: US/10/812,238D

TIME: 19:1:

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

L:92 M:283 W: Missing Blank Line separator, <400> field identifier L:424 M:283 W: Missing Blank Line separator, <400> field identifier L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0 L:578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0

# Raw Sequence Listing before editing (for reference only)



IFW16

RAW SEQUENCE LISTING DATE: 04/13/2006
PATENT APPLICATION: US/10/812,238D TIME: 14:35:53

Input Set : A:\D6563SEQ.txt

Output Set: N:\CRF4\04132006\J812238D.raw

#### ERRORED SEQUENCES

Does Not Comply Corrected Diskette Needed

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594 <210> SEQ ID NO: 42
     595 <211> LENGTH: 37
     596 <212> TYPE: PRT
     597 <213> ORGANISM: Artificial Sequence
     599 <220> FEATURE:
     600 <223> OTHER INFORMATION: amino acid sequence of PAP2b in the
     601
               pGst-PAP2b-C-cyto construct
     603 <400> SEQUENCE: 42
     604 Ser Asp Leu Phe Lys Thr Lys Thr Thr Leu Ser Leu Pro Ala Pro
                                              10
     606 Ala Ile Arg Lys Glu Ile Leu Ser Pro Val Asp Ile Ile Asp Arg
     607
                         20
                                              25
                                                                   30
     608 Asn Asn His His Asn Met Met
     609
                         35
E--> 612/??
E--> 614 ??
E--> 616 ??
E--> 618
```

VERIFICATION SUMMARY DATE: 04/13/2006
PATENT APPLICATION: US/10/812,238D TIME: 14:35:54

Input Set : A:\D6563SEQ.txt

Output Set: N:\CRF4\04132006\J812238D.raw

L:92 M:283 W: Missing Blank Line separator, <400> field identifier
L:424 M:283 W: Missing Blank Line separator, <400> field identifier
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:612 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:612 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
L:614 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:42
L:614 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:614 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
M:332 Repeated in SeqNo=42
L:616 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:616 M:333 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
L:618 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:618 M:333 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1